AMENDMENTS TO CLAIMS

Please amend claims 39, 60 and 77 as indicated. Please cancel claim 44.

Claims 1-38 (Previously cancelled)

39. (Currently amended) transparent capacitive touch sensing system comprising:

a substrate;

a sensory array disposed on the substrate and comprising a plurality of substantially transparent conductive traces disposed along a first axis, the sensory array covering a portion of the substrate, wherein the sensory array is configured to sense capacitively the input object along a second axis;

a substantially transparent ground plane coupled to the bottom of the substrate and configured to shield electrically the sensory array; and

a sensing device for detecting capacitance changes on said sensory array.

~~a plurality of substantially transparent conductive traces in one axis disposed on a single substrate forming a sensory array covering a portion of said substrate, each said substantially transparent conductive trace capacitively senses an input object when proximate to each said substantially transparent conductive trace, for sensing capacitive coupling between said input object and said sensory array along one axis; and~~

~~a sensing device for detecting capacitance changes on said sensory array~~.

40. (Previously amended) The system of claim 39, further including a position detector for determining a position of said input object near said sensory array.

41. (Previously Added) The system of claim 39, further including a system that recognizes tap gestures.

42. (Previously amended) The system of claim 39, wherein said substrate is a flexible, transparent substrate.

43. (Previously amended) The system of claim 39, wherein said substrate is a rigid, transparent substrate.

44. (Cancelled)

45. (Previously amended) The system of claim 39, wherein said sensory array is atop a display device.

Claims 46-54 (Previously cancelled)

55. (Previously amended) A transparent capacitive touch sensing system comprising:

a substantially transparent two-dimensional sensory array consisting of a plurality of substantially transparent conductive traces in an X axis and a plurality of substantially transparent conductive traces in a Y axis for sensing capacitive coupling between an input object and said sensory array along two axes, wherein a bottom of said sensory array is electrically shielded using a substantially transparent ground plane;

a substantially transparent electrically insulating material separating said plurality of X traces from said plurality of Y traces; and

a sensing device for detecting capacitance changes on said sensory array.

Claims 56-59 (Previously cancelled)

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60. (Currently amended) transparent capacitive touch sensing system comprising:

a substantially transparent two-dimensional sensory array consisting of a plurality of substantially transparent conductive traces in an X axis and a plurality of substantially transparent conductive traces in a Y axis for sensing capacitive coupling between an input object and said sensory array along two axes, wherein said conductive traces in the X axis and the Y axis form a substantially space-filling pattern;

a substantially transparent electrically insulating material separating said plurality of X traces from said plurality of Y traces; and

a sensing device for detecting capacitance changes on said sensory array.

61. (Previously amended)The system of claim 60, wherein said sensory array comprises a plurality of layers having approximately the same index of refraction.

62. (Previously amended) The system of claim 60, wherein said sensory array is atop a display device.

63. (Previously amended) The system of claim 60, wherein said sensory array is beneath a clear protective covering for a display device.

64. (Previously Added) In combination:

a liquid crystal display having a top polarizer layer; and

a transparent touchpad disposed on said top polarizer layer, including

a plurality of first conductors disposed along an X axis directly on said top polarizer layer; and

a plurality of second conductors disposed along a Y axis and insulated from said plurality of first conductors disposed along said X axis.

65. (Previously Added) The combination of Claim 64, wherein an insulating layer insulates said plurality of first conductors disposed along said X axis from said plurality of second conductors disposed along said Y axis.

66. (Previously Added) The combination of Claim 64, further comprising an adhesive layer disposed on one of said first and said second plurality of conductors.

67. (Previously Added) The combination of Claim 66, further comprising a transparent layer disposed on said adhesive layer.

68. (Previously Added) In combination:

a liquid crystal display having a top polarizer layer; and

a transparent touchpad disposed on said top polarizer layer, including a plurality of conductors disposed along at least one axis directly on said top polarizer layer.

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69. (Previously Added) In combination:

a cathode ray tube having a glass envelope; and

a transparent touchpad disposed on said glass envelope, including

a plurality of first conductors disposed along an X axis directly on said glass envelope; and

a plurality of second conductors disposed along a Y axis and insulated from said plurality of first conductors disposed along said X axis.

70. (Previously Added) The combination of Claim 69, wherein an insulating layer insulates said plurality of first conductors disposed along said X axis from said plurality of second conductors disposed along said Y axis.

71. (Previously Added) The combination of Claim 69, further comprising an adhesive layer disposed on one of said first and said second plurality of conductors.

72. (Previously Added) The combination of Claim 71, further comprising a transparent layer disposed on said adhesive layer.

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73. (Previously Added) In combination:

a liquid crystal display; and

a transparent touchpad disposed on said liquid crystal display, including

a plurality of first conductors disposed along an X axis directly on said liquid crystal display; and

a plurality of second conductors disposed along a Y axis and insulated from said plurality of first conductors disposed along said X axis.

74. (Previously Added) The combination of Claim 73, wherein an insulating layer insulates said plurality of first conductors disposed along said X axis from said plurality of second conductors disposed along said Y axis.

75. (Previously Added) The combination of Claim 73, further comprising an adhesive layer disposed on one of said first and said second plurality of conductors.

76. (Previously Added) The combination of Claim 75, further comprising a transparent layer disposed on said adhesive layer.

77. (Currently amended) In combination:

a fingerprint sensor having a surface layer; and

a transparent touchpad disposed on said surface layer, including a plurality of conductors disposed along at least one axis directly on said surface ~~top~~ layer.

78. (Previously Added) In combination:

a graphic underlay; and

a transparent touchpad disposed on said graphic underlay, including a plurality of conductors disposed along at least one axis directly on said graphic underlay.

79. (Previously added) A substantially transparent capacitive sensor comprising:

an active area configured to accept input from a conductive object, said active area including a plurality of substantially transparent conductive traces disposed in an X axis and a plurality of substantially transparent conductive traces disposed in a Y axis;

wherein the capacitive sensor has a substantially uniform transmissivity within said active area.

80. (Previously added) The substantially transparent capacitive sensor of Claim 79, wherein said plurality of substantially transparent conductive traces disposed in said X axis and said plurality of substantially transparent conductive traces disposed in said Y axis together substantially occupy said active area.

81. (Previously added) The substantially transparent capacitive sensor of Claim 79, wherein said plurality of substantially transparent conductive traces disposed in said X axis and said plurality of substantially transparent conductive traces disposed in said Y axis are aligned to maximize transparency.